

**REMARKS**

Claims 2-6, 10, and 11 are all the claims pending in the application. Claims 2 and 11 have been amended and claims 13 and 14 have been added herein. Claim 3 has been cancelled without prejudice or disclaimer. This Response, submitted in reply to the Office Action dated March 30, 2009, is believed to be fully responsive to each point of rejection raised therein. Accordingly, favorable reconsideration on the merits is respectfully requested.

**Claim Objections**

Claim 11 has been objected to because of certain informalities. Merely as a path of least resistance, claim 11 has been amended herein, and Applicant respectfully submits that all of the Examiner's concerns have been fully addressed. Therefore, Applicant respectfully requests that these objections be withdrawn.

**Claim Rejections - 35 U.S.C. § 112**

Claim 11 also stands rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite. Specifically, the Examiner asserts that in line 28 of claim 11, there is no antecedent basis for the term "*the second tread rubber portion*". Thus, the Examiner suggests adding the word "*portion*" after "*a second tread rubber*" on line 23. Merely as a path of least resistance, claim 11 has been amended as suggested by the Examiner. Therefore, Applicant respectfully requests that this rejection be withdrawn.

**Claim Rejections - 35 U.S.C. § 103**

Claims 2, 3, 5, and 11 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Koyama et al. (U.S. Publication 2002/0007893) in view of Verbrugghe (WO 98/38050) and Japan 426 (JP 11-020426). Applicant respectfully traverses this rejection.

Claim 2 recites:

A tire comprising at least one tread layer consisting of a tread rubber made of a low-conductive rubber and an electrically conductive band arranged in widthwise middle portion of the tread rubber and constituting at least a part of a conductive path from a belt to a treading face of a tread in which a first tread rubber portion of the tread rubber separated from a second tread rubber portion by the electrically conductive band is arranged so as to orient a side face thereof contacting with the electrically conductive band outward in the radial direction, and the electrically conductive band is made of a high-conductive thin annular rubber sheet and the high-conductive thin annular rubber sheet comprising

a top part extending in a tire width direction on a top face of the first tread rubber portion,

a bottom part extending in the tire width direction under a bottom face of the second tread rubber portion separated by the electrically conductive band and

a middle part extending from an end of the top part in the width direction toward an end of the bottom part in the width direction,

wherein the tread rubber is made of a low-conductive continuous rubber ribbon circumferentially wound plural times.

In rejecting claim 2, the Examiner acknowledges that Koyama does not teach the claimed high-conductive thin annular rubber sheet having a top part extending on a top face, and a bottom part extending under a bottom face as claimed. However, the Examiner asserts that the newly applied Verbrugghe and Japan 426 references cure the deficiencies of Koyama.

The applicant respectfully submits that the Examiner has misconstrued the applied references, especially with respect to the Verbrughe reference. Two main technical features of an exemplary tire consistent with claim 2 are:

1) an electrically conductive band having “a top part extending in a tire width direction on a top face of the first tread rubber portion, a bottom part extending in the tire width direction under a bottom face of the second tread rubber portion, and a middle part extending from an end of the top part in the width direction toward an end of the bottom part in the width direction”; and

2) a “tread rubber made of a low-conductive continuous rubber ribbon circumferentially wound plural times”.

The advantageous effects from these features have been described in previously filed responses and are explained in the specification. *See*, for example, Paragraphs [0012]-[0015].

In the Office Action, the Examiner asserts that that Verbrugghe discloses an electrically conductive band having a top part, a middle part and a bottom part corresponding to the features recited in claim 2. Applicant respectfully submits this assertion is unreasonable because the asserted top, middle and bottom parts of Verbrugghe extend in the circumferential direction. *See* Figs. 2 and 3. Conversely, claim 2 clearly requires that these parts extend in the widthwise direction. Applicant respectfully submits that the configurations of the electrically conductive band taught by Verbrugghe are completely different from those claimed in claim 2.

Further, the electrically conductive band of Verbrugghe is arranged between circumferential ends of one non-conductive ply. Conversely, as claimed, the electrically conductive band is arranged between width ends (“side faces”) of two, separated rubber portions (i.e., the first and second tread rubber portions). In order to arrange the electrically conductive band as claimed, it is necessary to form the tread rubber portions by winding a continuous rubber ribbon circumferentially multiple times.

In Verbrugghe, the tire components, including the tread rubber portion are built with a conventional method, making it not practical to form a tread rubber from two tread rubber portions, separated in the width direction and arranged with an electrically conductive band there between. Thus, Applicant respectfully submits that the Examiner's assertions regarding Verbrugghe are unreasonable and the result of improper hindsight. Further, an exemplary tire consistent with claim 2 can securely discharge static electricity regardless of the circumferential position of the tire while the tire of Verbrugghe only has one discharging point disposed in only a portion of the entire circumference. Therefore, Applicant respectfully submits that the effects of the structure taught by Verbrugghe are clearly different from those recited in claim 2.

For all of the above discussed reasons, Applicant respectfully submits that claim 2, and all claims dependant thereon are patentable over the applied references. Further to the extent that claim 11 recites features similar to those discussed above, Applicant respectfully submits that claim 11, and all claims dependant thereon are patentable for analogous reasons.

**Newly Added Claims**

Claims 13 and 14 have been added herein and described the specific embodiment shown in Fig. 1 of specification. Applicant respectfully submits that none of the applied references teach or even fairly suggest the unique features recited therein.

Specifically, claims 13 and 14 each describe a tire, which has a base tread layer and a cap tread layer disposed outside of the base tread layer, each tread layer consisting of a first tread rubber portion and a second tread rubber portion. In each tread rubber layer, an electrically conductive band having high electric conduction is arranged in a middle point of the tread rubber in a widthwise direction of the tire. Further, the electrically conductive bands are electrically connected with each other. Further, the middle parts of the electrically conductive bands incline in mutually opposite directions between the base and cap tread layers (*i.e.* the overall shape of the electrically conductive bands is like a dogleg). *See* Fig. 1.

If the middle parts of the electrically conductive bands incline in the same direction, the volumes of rubber are different in the first and second tread rubber portions, which can adversely affect tire performance. Further, the widthwise middle points of the electrically conductive bands have different widthwise positions, which makes configuration and/or control of a means for applying the electrically conductive band onto the tread rubber portion complicated.

Conversely, if the electrically conductive bands have different inclination directions as claimed, uniform volume of the rubber between the first and second tread rubber portions can be provided as well as a constant widthwise position of the middle point of the electrically conductive bands.

None of the applied references teach, or even fairly suggest the features of claims 13 and 14. Therefore, Applicant respectfully submits that these claims are patentable for at least these reason.

**Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880 via EFS payment screen. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

/Michael C. Jones/  
Michael C. Jones  
Registration No. 63,266

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

WASHINGTON OFFICE

**23373**

CUSTOMER NUMBER

Date: June 30, 2009